

1 **R307. Environmental Quality, Air Quality.**

2 **R307-101. General Requirements.**

3 **R307-101-2. Definitions.**

4 Except where specified in individual rules, definitions in
5 R307-101-2 are applicable to all rules adopted by the Air
6 Quality Board.

7 "Actual Emissions" means the actual rate of emissions of a
8 pollutant from an emissions unit determined as follows:

9 (1) In general, actual emissions as of a particular date
10 shall equal the average rate, in tons per year, at which the
11 unit actually emitted the pollutant during a two-year period
12 which precedes the particular date and which is representative
13 of normal source operations. The Executive Secretary shall
14 allow the use of a different time period upon a determination
15 that it is more representative of normal source operation.
16 Actual emissions shall be calculated using the unit's actual
17 operating hours, production rates, and types of materials
18 processed, stored, or combusted during the selected time period.

19 (2) The Executive Secretary may presume that source-
20 specific allowable emissions for the unit are equivalent to the
21 actual emissions of the unit.

22 (3) For any emission unit, other than an electric utility
23 steam generating unit specified in (4), which has not begun
24 normal operations on the particular date, actual emissions shall
25 equal the potential to emit of the unit on that date.

26 (4) For an electric utility steam generating unit (other
27 than a new unit or the replacement of an existing unit) actual
28 emissions of the unit following the physical or operational
29 change shall equal the representative actual annual emissions of
30 the unit, provided the source owner or operator maintains and
31 submits to the executive secretary, on an annual basis for a
32 period of 5 years from the date the unit resumes regular
33 operation, information demonstrating that the physical or
34 operational change did not result in an emissions increase. A
35 longer period, not to exceed 10 years, may be required by the
36 executive secretary if the executive secretary determines such a
37 period to be more representative of normal source post-change
38 operations.

39 "Acute Hazardous Air Pollutant" means any noncarcinogenic
40 hazardous air pollutant for which a threshold limit value -
41 ceiling (TLV-C) has been adopted by the American Conference of
42 Governmental Industrial Hygienists in its "Threshold Limit
43 Values for Chemical Substances and Physical Agents and
44 Biological Exposure Indices, pages 15 - 72 (2000)."

45 "Air Contaminant" means any particulate matter or any gas,
46 vapor, suspended solid or any combination of them, excluding
47 steam and water vapors (Section 19-2-102(1)).

1 "Air Contaminant Source" means any and all sources of
2 emission of air contaminants whether privately or publicly owned
3 or operated (Section 19-2-102(2)).

4 "Air Pollution" means the presence in the ambient air of
5 one or more air contaminants in such quantities and duration and
6 under conditions and circumstances, as is or tends to be
7 injurious to human health or welfare, animal or plant life, or
8 property, or would unreasonably interfere with the enjoyment of
9 life or use of property as determined by the standards, rules
10 and regulations adopted by the Air Quality Board (Section 19-2-
11 104).[

12 ~~—"Air Quality Related Values" means, as used in analyses~~
13 ~~under R307-401-4(1), Public Notice, those special attributes of~~
14 ~~a Class I area, assigned by a federal Land Manager, that are~~
15 ~~adversely affected by air quality.]~~

16 "Allowable Emissions" means the emission rate of a source
17 calculated using the maximum rated capacity of the source
18 (unless the source is subject to enforceable limits which
19 restrict the operating rate, or hours of operation, or both) and
20 the emission limitation established pursuant to R307-401-[6]8.

21 "Ambient Air" means the surrounding or outside air (Section
22 19-2-102(4)).

23 "Appropriate Authority" means the governing body of any
24 city, town or county.

25 "Asphalt or Asphalt Cement" means the dark brown to black
26 cementitious material (solid, semisolid, or liquid in
27 consistency) of which the main constituents are bitumens which
28 occur naturally or as a residue of petroleum refining.

29 "Atmosphere" means the air that envelops or surrounds the
30 earth and includes all space outside of buildings, stacks or
31 exterior ducts.

32 "Authorized Local Authority" means a city, county, city-
33 county or district health department; a city, county or
34 combination fire department; or other local agency duly
35 designated by appropriate authority, with approval of the state
36 Department of Health; and other lawfully adopted ordinances,
37 codes or regulations not in conflict therewith.[

38 ~~—"Baseline Date"~~

39 ~~—(1) Major source baseline date means:~~

40 ~~(a) in the case of particulate matter:~~

41 ~~(i) for Davis, Salt Lake, Utah, and Weber Counties, the~~
42 ~~date that EPA approves the PM10 maintenance plan that was~~
43 ~~adopted by the Board on July 6, 2005;~~

44 ~~(ii) for all other areas of the state, January 6, 1975;~~

45 ~~(b) in the case of sulfur dioxide:~~

46 ~~(i) for Salt Lake County, the date that EPA approves the~~
47 ~~Sulfur Dioxide maintenance plan that was adopted by the Board on~~

~~January 5, 2005;~~

~~(ii) for all other areas of the state, January 6, 1975;~~
~~and~~

~~(c) in the case of nitrogen dioxide, February 8, 1988.~~

~~(2) Minor source baseline date means the earliest date after the trigger date on which the first complete application under 40 CFR 52.21 or R307-405 is submitted by a major source or major modification subject to the requirements of 40 CFR 52.21 or R307-405. The minor source baseline is the date after which emissions from all new or modified sources consume or expand increment, including emissions from major and minor sources as well as any or all general commercial, residential, industrial, and other growth. The trigger date is:~~

~~(a) In the case of particulate matter and sulfur dioxide, August 7, 1977, and~~

~~(b) In the case of nitrogen dioxide, February 8, 1988.~~

~~"Best Available Control Technology (BACT)" means an emission limitation and/or other controls to include design, equipment, work practice, operation standard or combination thereof, based on the maximum degree of reduction of each pollutant subject to regulation under the Clean Air Act and/or the Utah Air Conservation Act emitted from or which results from any emitting installation, which the Air Quality Board, on a case-by-case basis taking into account energy, environmental and economic impacts and other costs, determines is achievable for such installation through application of production processes and available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall applications of BACT result in emissions of any pollutants which will exceed the emissions allowed by Section 111 or 112 of the Clean Air Act.]~~

~~"Board" means Air Quality Board. See Section 19-2-102(6)(a).~~

~~"Breakdown" means any malfunction or procedural error, to include but not limited to any malfunction or procedural error during start-up and shutdown, which will result in the inoperability or sudden loss of performance of the control equipment or process equipment causing emissions in excess of those allowed by approval order or Title R307.~~

~~"BTU" means British Thermal Unit, the quantity of heat necessary to raise the temperature of one pound of water one degree Fahrenheit.~~

~~"Calibration Drift" means the change in the instrument meter readout over a stated period of time of normal continuous operation when the VOC concentration at the time of measurement is the same known upscale value.~~

1 "Carbon Adsorption System" means a device containing
2 adsorbent material (e.g., activated carbon, aluminum, silica
3 gel), an inlet and outlet for exhaust gases, and a system for
4 the proper disposal or reuse of all VOC adsorbed.

5 "Carcinogenic Hazardous Air Pollutant" means any hazardous
6 air pollutant that is classified as a known human carcinogen
7 (A1) or suspected human carcinogen (A2) by the American
8 Conference of Governmental Industrial Hygienists in its
9 "Threshold Limit Values for Chemical Substances and Physical
10 Agents and Biological Exposure Indices, pages 15 - 72 (2000)."

11 "Chargeable Pollutant" means any regulated air pollutant
12 except the following:

13 (1) Carbon monoxide;

14 (2) Any pollutant that is a regulated air pollutant solely
15 because it is a Class I or II substance subject to a standard
16 promulgated or established by Title VI of the Act, Stratospheric
17 Ozone Protection;

18 (3) Any pollutant that is a regulated air pollutant solely
19 because it is subject to a standard or regulation under Section
20 112(r) of the Act, Prevention of Accidental Releases.

21 "Chronic Hazardous Air Pollutant" means any noncarcinogenic
22 hazardous air pollutant for which a threshold limit value - time
23 weighted average (TLV-TWA) having no threshold limit value -
24 ceiling (TLV-C) has been adopted by the American Conference of
25 Governmental Industrial Hygienists in its "Threshold Limit
26 Values for Chemical Substances and Physical Agents and
27 Biological Exposure Indices, pages 15 - 72 (2000)."

28 "Clean Air Act" means federal Clean Air Act as amended in
29 1990.

30 "Clean Coal Technology" means any technology, including
31 technologies applied at the precombustion, combustion, or post
32 combustion stage, at a new or existing facility which will
33 achieve significant reductions in air emissions of sulfur
34 dioxide or oxides of nitrogen associated with the utilization of
35 coal in the generation of electricity, or process steam which
36 was not in widespread use as of November 15, 1990.

37 "Clean Coal Technology Demonstration Project" means a
38 project using funds appropriated under the heading "Department
39 of Energy-Clean Coal Technology," up to a total amount of
40 \$2,500,000,000 for commercial demonstration of clean coal
41 technology, or similar projects funded through appropriations
42 for the Environmental Protection Agency. The Federal
43 contribution for a qualifying project shall be at least 20
44 percent of the total cost of the demonstration project.

45 "Clearing Index" means an indicator of the predicted rate
46 of clearance of ground level pollutants from a given area. This
47 number is provided by the National Weather Service.

1 "Commence" as applied to construction of a major source or
2 major modification means that the owner or operator has all
3 necessary pre-construction approvals or permits and either has:

4 (1) Begun, or caused to begin, a continuous program of
5 actual on-site construction of the source, to be completed
6 within a reasonable time; or

7 (2) Entered into binding agreements or contractual
8 obligations, which cannot be canceled or modified without
9 substantial loss to the owner or operator, to undertake a
10 program of actual construction of the source to be completed
11 within a reasonable time.

12 "Compliance Schedule" means a schedule of events, by date,
13 which will result in compliance with these regulations.

14 "Construction" means any physical change or change in the
15 method of operation including fabrication, erection,
16 installation, demolition, or modification of a source which
17 would result in a change in actual emissions.

18 "Control Apparatus" means any device which prevents or
19 controls the emission of any air contaminant directly or
20 indirectly into the outdoor atmosphere.

21 "Department" means Utah State Department of Environmental
22 Quality. See Section 19-1-103(1).

23 "Electric Utility Steam Generating Unit" means any steam
24 electric generating unit that is constructed for the purpose of
25 supplying more than one-third of its potential electric output
26 capacity and more than 25 MW electrical output to any utility
27 power distribution system for sale. Any steam supplied to a
28 steam distribution system for the purpose of providing steam to
29 a steam-electric generator that would produce electrical energy
30 for sale is also considered in determining the electrical energy
31 output capacity of the affected facility.

32 "Emission" means the act of discharge into the atmosphere
33 of an air contaminant or an effluent which contains or may
34 contain an air contaminant; or the effluent so discharged into
35 the atmosphere.

36 "Emissions Information" means, with reference to any source
37 operation, equipment or control apparatus:

38 (1) Information necessary to determine the identity,
39 amount, frequency, concentration, or other characteristics
40 related to air quality of any air contaminant which has been
41 emitted by the source operation, equipment, or control
42 apparatus;

43 (2) Information necessary to determine the identity,
44 amount, frequency, concentration, or other characteristics (to
45 the extent related to air quality) of any air contaminant which,
46 under an applicable standard or limitation, the source operation
47 was authorized to emit (including, to the extent necessary for

1 such purposes, a description of the manner or rate of operation
2 of the source operation), or any combination of the foregoing;
3 and

4 (3) A general description of the location and/or nature of
5 the source operation to the extent necessary to identify the
6 source operation and to distinguish it from other source
7 operations (including, to the extent necessary for such
8 purposes, a description of the device, installation, or
9 operation constituting the source operation).

10 "Emission Limitation" means a requirement established by
11 the Board or the Administrator, EPA, which limits the quantity,
12 rate or concentration of emission of air pollutants on a
13 continuous emission reduction including any requirement relating
14 to the operation or maintenance of a source to assure continuous
15 emission reduction (Section 302(k)).

16 "Emissions Unit" means any part of a stationary source
17 which emits or would have the potential to emit any pollutant
18 subject to regulation under the Clean Air Act.

19 "Enforceable" means all limitations and conditions which
20 are enforceable by the Administrator, including those
21 requirements developed pursuant to 40 CFR Parts 60 and 61,
22 requirements within the State Implementation Plan and R307, any
23 permit requirements established pursuant to 40 CFR 52.21 or
24 R307-401.

25 "EPA" means Environmental Protection Agency.

26 "EPA Method 9" means 40 CFR Part 60, Appendix A, Method 9,
27 "Visual Determination of Opacity of Emissions from Stationary
28 Sources," and Alternate 1, "Determination of the opacity of
29 emissions from stationary sources remotely by LIDAR."

30 "Executive Director" means the Executive Director of the
31 Utah Department of Environmental Quality. See Section 19-1-
32 103(2).

33 "Executive Secretary" means the Executive Secretary of the
34 Board.

35 "Existing Installation" means an installation, construction
36 of which began prior to the effective date of any regulation
37 having application to it.

38 "Facility" means machinery, equipment, structures of any
39 part or accessories thereof, installed or acquired for the
40 primary purpose of controlling or disposing of air pollution.
41 It does not include an air conditioner, fan or other similar
42 device for the comfort of personnel.

43 "Fireplace" means all devices both masonry or factory built
44 units (free standing fireplaces) with a hearth, fire chamber or
45 similarly prepared device connected to a chimney which provides
46 the operator with little control of combustion air, leaving its
47 fire chamber fully or at least partially open to the room.

1 Fireplaces include those devices with circulating systems, heat
2 exchangers, or draft reducing doors with a net thermal
3 efficiency of no greater than twenty percent and are used for
4 aesthetic purposes.

5 "Fugitive Dust" means particulate, composed of soil and/or
6 industrial particulates such as ash, coal, minerals, etc., which
7 becomes airborne because of wind or mechanical disturbance of
8 surfaces. Natural sources of dust and fugitive emissions are
9 not fugitive dust within the meaning of this definition.

10 "Fugitive Emissions" means emissions from an installation
11 or facility which are neither passed through an air cleaning
12 device nor vented through a stack or could not reasonably pass
13 through a stack, chimney, vent, or other functionally equivalent
14 opening.

15 "Garbage" means all putrescible animal and vegetable matter
16 resulting from the handling, preparation, cooking and
17 consumption of food, including wastes attendant thereto.

18 "Gasoline" means any petroleum distillate, used as a fuel
19 for internal combustion engines, having a Reid vapor pressure of
20 4 pounds or greater.

21 "Hazardous Air Pollutant (HAP)" means any pollutant listed
22 by the EPA as a hazardous air pollutant in conformance with
23 Section 112(b) of the Clean Air Act. A list of these pollutants
24 is available at the Division of Air Quality.

25 "Heavy Fuel Oil" means a petroleum product or similar
26 material with a boiling range higher than that of diesel fuel.

27 "Household Waste" means any solid or liquid material
28 normally generated by the family in a residence in the course of
29 ordinary day-to-day living, including but not limited to
30 garbage, paper products, rags, leaves and garden trash.

31 "Incinerator" means a combustion apparatus designed for
32 high temperature operation in which solid, semisolid, liquid, or
33 gaseous combustible wastes are ignited and burned efficiently
34 and from which the solid and gaseous residues contain little or
35 no combustible material. [

36 ~~"Indirect Source" means a building, structure or~~
37 ~~installation which attracts or may attract mobile source~~
38 ~~activity that results in emission of a pollutant for which there~~
39 ~~is a national standard.]~~

40 "Installation" means a discrete process with identifiable
41 emissions which may be part of a larger industrial plant.
42 Pollution equipment shall not be considered a separate
43 installation or installations.

44 "LPG" means liquified petroleum gas such as propane or
45 butane.

46 "Maintenance Area" means an area that is subject to the
47 provisions of a maintenance plan that is included in the Utah

1 state implementation plan, and that has been redesignated by EPA
2 from nonattainment to attainment of any National Ambient Air
3 Quality Standard.

4 (a) The following areas are considered maintenance areas
5 for ozone:

6 (i) Salt Lake County, effective August 18, 1997; and

7 (ii) Davis County, effective August 18, 1997.

8 (b) The following areas are considered maintenance areas
9 for carbon monoxide:

10 (i) Salt Lake City, effective March 22, 1999;

11 (ii) Ogden City, effective May 8, 2001; and

12 (iii) Provo City, effective on the date that EPA approves
13 the maintenance plan that was adopted by the Board on March 31,
14 2004.

15 (c) The following areas are considered maintenance areas
16 for PM10:

17 (i) Salt Lake County, effective on the date that EPA
18 approves the maintenance plan that was adopted by the Board on
19 July 6, 2005; and

20 (ii) Utah County, effective on the date that EPA approves
21 the maintenance plan that was adopted by the Board on July 6,
22 2005; and

23 (iii) Ogden City, effective on the date that EPA approves
24 the maintenance plan that was adopted by the Board on July 6,
25 2005.

26 (d) The following areas are considered maintenance areas
27 for sulfur dioxide:

28 (i) Salt Lake County, effective on the date that EPA
29 approves the maintenance plan that was adopted by the Board on
30 January 5, 2005; and

31 (ii) the eastern portion of Tooele County above 5600 feet.

32 "Major Modification" means any physical change in or change
33 in the method of operation of a major source that would result
34 in a significant net emissions increase of any pollutant. A net
35 emissions increase that is significant for volatile organic
36 compounds shall be considered significant for ozone. Within
37 Salt Lake and Davis Counties or any nonattainment area for
38 ozone, a net emissions increase that is significant for nitrogen
39 oxides shall be considered significant for ozone. Within areas
40 of nonattainment for PM10, a significant net emission increase
41 for any PM10 precursor is also a significant net emission
42 increase for PM10. A physical change or change in the method of
43 operation shall not include:

44 (1) routine maintenance, repair and replacement;

45 (2) use of an alternative fuel or raw material by reason
46 of an order under section 2(a) and (b) of the Energy Supply and
47 Environmental Coordination Act of 1974, or by reason of a

1 natural gas curtailment plan pursuant to the Federal Power Act;

2 (3) use of an alternative fuel by reason of an order or
3 rule under section 125 of the federal Clean Air Act;

4 (4) use of an alternative fuel at a steam generating unit
5 to the extent that the fuel is generated from municipal solid
6 waste;

7 (5) use of an alternative fuel or raw material by a
8 source:

9 (a) which the source was capable of accommodating before
10 January 6, 1975, unless such change would be prohibited under
11 any enforceable permit condition; or

12 (b) which the source is otherwise approved to use;

13 (6) an increase in the hours of operation or in the
14 production rate unless such change would be prohibited under any
15 enforceable permit condition;

16 (7) any change in ownership at a source

17 (8) the addition, replacement or use of a pollution
18 control project at an existing electric utility steam generating
19 unit, unless the executive secretary determines that such
20 addition, replacement, or use renders the unit less
21 environmentally beneficial, or except:

22 (a) when the executive secretary has reason to believe
23 that the pollution control project would result in a significant
24 net increase in representative actual annual emissions of any
25 criteria pollutant over levels used for that source in the most
26 recent air quality impact analysis in the area conducted for the
27 purpose of Title I of the Clean Air Act, if any, and

28 (b) the executive secretary determines that the increase
29 will cause or contribute to a violation of any national ambient
30 air quality standard or PSD increment, or visibility limitation.

31 (9) the installation, operation, cessation, or removal of
32 a temporary clean coal demonstration project, provided that the
33 project complies with:

34 (a) the Utah State Implementation Plan; and

35 (b) other requirements necessary to attain and maintain
36 the national ambient air quality standards during the project
37 and after it is terminated.

38 "Major Source" means, to the extent provided by the federal
39 Clean Air Act as applicable to R307:

40 (1) any stationary source of air pollutants which emits,
41 or has the potential to emit, one hundred tons per year or more
42 of any pollutant subject to regulation under the Clean Air Act;
43 or

44 (a) any source located in a nonattainment area for carbon
45 monoxide which emits, or has the potential to emit, carbon
46 monoxide in the amounts outlined in Section 187 of the federal
47 Clean Air Act with respect to the severity of the nonattainment

1 area as outlined in Section 187 of the federal Clean Air Act; or

2 (b) any source located in Salt Lake or Davis Counties or
3 in a nonattainment area for ozone which emits, or has the
4 potential to emit, VOC or nitrogen oxides in the amounts
5 outlined in Section 182 of the federal Clean Air Act with
6 respect to the severity of the nonattainment area as outlined in
7 Section 182 of the federal Clean Air Act; or

8 (c) any source located in a nonattainment area for PM10
9 which emits, or has the potential to emit, PM10 or any PM10
10 precursor in the amounts outlined in Section 189 of the federal
11 Clean Air Act with respect to the severity of the nonattainment
12 area as outlined in Section 189 of the federal Clean Air Act.

13 (2) any physical change that would occur at a source not
14 qualifying under subpart 1 as a major source, if the change
15 would constitute a major source by itself;

16 (3) the fugitive emissions and fugitive dust of a
17 stationary source shall not be included in determining for any
18 of the purposes of these R307 rules whether it is a major
19 stationary source, unless the source belongs to one of the
20 following categories of stationary sources:

- 21 (a) Coal cleaning plants (with thermal dryers);
- 22 (b) Kraft pulp mills;
- 23 (c) Portland cement plants;
- 24 (d) Primary zinc smelters;
- 25 (e) Iron and steel mills;
- 26 (f) Primary aluminum or reduction plants;
- 27 (g) Primary copper smelters;
- 28 (h) Municipal incinerators capable of charging more than
29 250 tons of refuse per day;
- 30 (i) Hydrofluoric, sulfuric, or nitric acid plants;
- 31 (j) Petroleum refineries;
- 32 (k) Lime plants;
- 33 (l) Phosphate rock processing plants;
- 34 (m) Coke oven batteries;
- 35 (n) Sulfur recovery plants;
- 36 (o) Carbon black plants (furnace process);
- 37 (p) Primary lead smelters;
- 38 (q) Fuel conversion plants;
- 39 (r) Sintering plants;
- 40 (s) Secondary metal production plants;
- 41 (t) Chemical process plants;
- 42 (u) Fossil-fuel boilers (or combination thereof) totaling
43 more than 250 million British Thermal Units per hour heat input;
- 44 (v) Petroleum storage and transfer units with a total
45 storage capacity exceeding 300,000 barrels;
- 46 (w) Taconite ore processing plants;
- 47 (x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more than 250 million British Thermal Units per hour heat input;

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the federal Clean Air Act.

"Modification" means any planned change in a source which results in a potential increase of emission.

"National Ambient Air Quality Standards (NAAQS)" means the allowable concentrations of air pollutants in the ambient air specified by the Federal Government (Title 40, Code of Federal Regulations, Part 50).

"Net Emissions Increase" means the amount by which the sum of the following exceeds zero:

(1) any increase in actual emissions from a particular physical change or change in method of operation at a source; and

(2) any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable. For purposes of determining a "net emissions increase":

(a) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date five years before construction on the particular change commences; and the date that the increase from the particular change occurs.

(b) An increase or decrease in actual emissions is creditable only if it has not been relied on in issuing a prior approval for the source which approval is in effect when the increase in actual emissions for the particular change occurs.

(c) An increase or decrease in actual emission of sulfur dioxide, nitrogen oxides or particulate matter which occurs before an applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available. With respect to particulate matter, only PM10 emissions will be used to evaluate this increase or decrease.

(d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(e) A decrease in actual emissions is creditable only to the extent that:

(i) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(ii) It is enforceable at and after the time that actual construction on the particular change begins; and

1 (iii) It has approximately the same qualitative
2 significance for public health and welfare as that attributed to
3 the increase from the particular change.

4 (iv) It has not been relied on in issuing any permit under
5 R307-401 nor has it been relied on in demonstrating attainment
6 or reasonable further progress.

7 (f) An increase that results from a physical change at a
8 source occurs when the emissions unit on which construction
9 occurred becomes operational and begins to emit a particular
10 pollutant. Any replacement unit that requires shakedown becomes
11 operational only after a reasonable shakedown period, not to
12 exceed 180 days.

13 "New Installation" means an installation, construction of
14 which began after the effective date of any regulation having
15 application to it.

16 "Nonattainment Area" means an area designated by the
17 Environmental Protection Agency as nonattainment under Section
18 107, Clean Air Act for any National Ambient Air Quality
19 Standard. The designations for Utah are listed in 40 CFR 81.345.

20 "Offset" means an amount of emission reduction, by a
21 source, greater than the emission limitation imposed on such
22 source by these regulations and/or the State Implementation
23 Plan.

24 "Opacity" means the capacity to obstruct the transmission
25 of light, expressed as percent.

26 "Open Burning" means any burning of combustible materials
27 resulting in emission of products of combustion into ambient air
28 without passage through a chimney or stack.

29 "Owner or Operator" means any person who owns, leases,
30 controls, operates or supervises a facility, an emission source,
31 or air pollution control equipment.

32 "PSD" Area means an area designated as attainment or
33 unclassifiable under section 107(d)(1)(D) or (E) of the federal
34 Clean Air Act.

35 "PM10" means particulate matter with an aerodynamic
36 diameter less than or equal to a nominal 10 micrometers as
37 measured by an EPA reference or equivalent method.

38 "PM10 Precursor" means any chemical compound or substance
39 which, after it has been emitted into the atmosphere, undergoes
40 chemical or physical changes that convert it into particulate
41 matter, specifically PM10.

42 "Part 70 Source" means any source subject to the permitting
43 requirements of R307-415.

44 "Peak Ozone Season" means June 1 through August 31,
45 inclusive.

46 "Person" means an individual, trust, firm, estate, company,
47 corporation, partnership, association, state, state or federal

1 agency or entity, municipality, commission, or political
2 subdivision of a state. (Subsection 19-2-103(4)).

3 "Pollution Control Project" means any activity or project
4 at an existing electric utility steam generating unit for
5 purposes of reducing emissions from such unit. Such activities
6 or projects are limited to:

7 (1) The installation of conventional or innovative
8 pollution control technology, including but not limited to
9 advanced flue gas desulfurization, sorbent injection for sulfur
10 dioxide and nitrogen oxides controls and electrostatic
11 precipitators;

12 (2) An activity or project to accommodate switching to a
13 fuel which is less polluting than the fuel used prior to the
14 activity or project, including, but not limited to natural gas
15 or coal reburning, or the cofiring of natural gas and other
16 fuels for the purpose of controlling emissions;

17 (3) A permanent clean coal technology demonstration
18 project conducted under Title II, sec. 101(d) of the Further
19 Continuing Appropriations Act of 1985 (sec. 5903(d) of title 42
20 of the United States Code), or subsequent appropriations, up to
21 a total amount of \$2,500,000,000 for commercial demonstration of
22 clean coal technology, or similar projects funded through
23 appropriations for the Environmental Protection Agency; or

24 (4) A permanent clean coal technology demonstration
25 project that constitutes a repowering project.

26 "Potential to Emit" means the maximum capacity of a source
27 to emit a pollutant under its physical and operational design.
28 Any physical or operational limitation on the capacity of the
29 source to emit a pollutant including air pollution control
30 equipment and restrictions on hours of operation or on the type
31 or amount of material combusted, stored, or processed shall be
32 treated as part of its design if the limitation or the effect it
33 would have on emissions is enforceable. Secondary emissions do
34 not count in determining the potential to emit of a stationary
35 source.

36 "Process Level" means the operation of a source, specific
37 to the kind or type of fuel, input material, or mode of
38 operation.

39 "Process Rate" means the quantity per unit of time of any
40 raw material or process intermediate consumed, or product
41 generated, through the use of any equipment, source operation,
42 or control apparatus. For a stationary internal combustion unit
43 or any other fuel burning equipment, this term may be expressed
44 as the quantity of fuel burned per unit of time.

45 "Production Equipment Exhaust System" means a device for
46 collecting and directing out of the work area VOC fugitive
47 emissions from reactor openings, centrifuge openings, and other

1 vessel openings for the purpose of protecting employees from
2 excessive VOC exposure.

3 "Reactivation of a Very Clean Coal-Fired Electric Utility
4 Steam Generating Unit" means any physical change in the method
5 of operation associated with the commencement of commercial
6 operations by a coal-fired utility unit after a period of
7 discontinued operation where the unit:

8 (1) Has not been in operation for the two-year period
9 prior to the enactment of the Clean Air Act Amendments of 1990,
10 and the emissions from such unit continue to be carried in the
11 emission inventory at the time of enactment;

12 (2) Was equipped prior to shutdown with a continuous
13 system of emissions control that achieves a removal efficiency
14 for sulfur dioxide of no less than 85 percent and a removal
15 efficiency for particulates of no less than 98 percent;

16 (3) Is equipped with low-NOx burners prior to the time of
17 commencement of operations following reactivation; and

18 (4) Is otherwise in compliance with the requirements of
19 the Clean Air Act.

20 "Reactor" means any vat or vessel, which may be jacketed to
21 permit temperature control, designed to contain chemical
22 reactions.

23 "Reasonable Further Progress" means annual incremental
24 reductions in emission of an air pollutant which are sufficient
25 to provide for attainment of the NAAQS by the date identified in
26 the State Implementation Plan.

27 "Refuse" means solid wastes, such as garbage and trash.

28 "Regulated air pollutant" means any of the following:

29 (a) Nitrogen oxides or any volatile organic compound;

30 (b) Any pollutant for which a national ambient air quality
31 standard has been promulgated;

32 (c) Any pollutant that is subject to any standard
33 promulgated under Section 111 of the Act, Standards of
34 Performance for New Stationary Sources;

35 (d) Any Class I or II substance subject to a standard
36 promulgated under or established by Title VI of the Act,
37 Stratospheric Ozone Protection;

38 (e) Any pollutant subject to a standard promulgated under
39 Section 112, Hazardous Air Pollutants, or other requirements
40 established under Section 112 of the Act, including Sections
41 112(g), (j), and (r) of the Act, including any of the following:

42 (i) Any pollutant subject to requirements under Section
43 112(j) of the Act, Equivalent Emission Limitation by Permit. If
44 the Administrator fails to promulgate a standard by the date
45 established pursuant to Section 112(e) of the Act, any pollutant
46 for which a subject source would be major shall be considered to
47 be regulated on the date 18 months after the applicable date

1 established pursuant to Section 112(e) of the Act;

2 (ii) Any pollutant for which the requirements of Section
3 112(g)(2) of the Act (Construction, Reconstruction and
4 Modification) have been met, but only with respect to the
5 individual source subject to Section 112(g)(2) requirement.

6 "Repowering" means replacement of an existing coal-fired
7 boiler with one of the following clean coal technologies:
8 atmospheric or pressurized fluidized bed combustion, integrated
9 gasification combined cycle, magnetohydrodynamics, direct and
10 indirect coal-fired turbines, integrated gasification fuel
11 cells, or as determined by the Administrator, in consultation
12 with the Secretary of Energy, a derivative of one or more of
13 these technologies, and any other technology capable of
14 controlling multiple combustion emissions simultaneously with
15 improved boiler or generation efficiency and with significantly
16 greater waste reduction relative to the performance of
17 technology in widespread commercial use as of November 15, 1990.

18 (1) Repowering shall also include any oil and/or gas-fired
19 unit which has been awarded clean coal technology demonstration
20 funding as of January 1, 1991, by the Department of Energy.

21 (2) The executive secretary shall give expedited
22 consideration to permit applications for any source that
23 satisfies the requirements of this definition and is granted an
24 extension under section 49 of the Clean Air Act.

25 "Representative Actual Annual Emissions" means the average
26 rate, in tons per year, at which the source is projected to emit
27 a pollutant for the two-year period after a physical change or
28 change in the method of operation of unit, (or a different
29 consecutive two-year period within 10 years after that change,
30 where the executive secretary determines that such period is
31 more representative of source operations), considering the
32 effect any such change will have on increasing or decreasing the
33 hourly emissions rate and on projected capacity utilization. In
34 projecting future emissions the executive secretary shall:

35 (1) Consider all relevant information, including but not
36 limited to, historical operational data, the company's own
37 representations, filings with the State of Federal regulatory
38 authorities, and compliance plans under title IV of the Clean
39 Air Act; and

40 (2) Exclude, in calculating any increase in emissions that
41 results from the particular physical change or change in the
42 method of operation at an electric utility steam generating
43 unit, that portion of the unit's emissions following the change
44 that could have been accommodated during the representative
45 baseline period and is attributable to an increase in projected
46 capacity utilization at the unit that is unrelated to the
47 particular change, including any increased utilization due to

1 the rate of electricity demand growth for the utility system as
2 a whole.

3 "Residence" means a dwelling in which people live,
4 including all ancillary buildings.

5 "Residential Solid Fuel Burning" device means any
6 residential burning device except a fireplace connected to a
7 chimney that burns solid fuel and is capable of, and intended
8 for use as a space heater, domestic water heater, or indoor
9 cooking appliance, and has an air-to-fuel ratio less than 35-to-
10 1 as determined by the test procedures prescribed in 40 CFR
11 60.534. It must also have a useable firebox volume of less than
12 6.10 cubic meters or 20 cubic feet, a minimum burn rate less
13 than 5 kilograms per hour or 11 pounds per hour as determined by
14 test procedures prescribed in 40 CFR 60.534, and weigh less than
15 800 kilograms or 362.9 pounds. Appliances that are described as
16 prefabricated fireplaces and are designed to accommodate doors
17 or other accessories that would create the air starved operating
18 conditions of a residential solid fuel burning device shall be
19 considered as such. Fireplaces are not included in this
20 definition for solid fuel burning devices.

21 "Road" means any public or private road.

22 "Salvage Operation" means any business, trade or industry
23 engaged in whole or in part in salvaging or reclaiming any
24 product or material, including but not limited to metals,
25 chemicals, shipping containers or drums.

26 "Secondary Emissions" means emissions which would occur as
27 a result of the construction or operation of a major source or
28 major modification, but do not come from the major source or
29 major modification itself.

30 Secondary emissions must be specific, well defined,
31 quantifiable, and impact the same general area as the source or
32 modification which causes the secondary emissions. Secondary
33 emissions include emissions from any off-site support facility
34 which would not be constructed or increase its emissions except
35 as a result of the construction or operation of the major source
36 or major modification. Secondary emissions do not include any
37 emissions which come directly from a mobile source such as
38 emissions from the tailpipe of a motor vehicle, from a train, or
39 from a vessel.

40 Fugitive emissions and fugitive dust from the source or
41 modification are not considered secondary emissions.

42 "Significant" means:

43 (1) In reference to a net emissions increase or the
44 potential of a source to emit any of the following pollutants, a
45 rate of emissions that would equal or exceed any of the
46 following rates:

47 Carbon monoxide: 100 ton per year (tpy);

Nitrogen oxides: 40 tpy;
Sulfur dioxide: 40 tpy;
PM10: 15 tpy;
Particulate matter: 25 tpy;
Ozone: 40 tpy of volatile organic compounds;
Lead: 0.6 tpy.]

~~(2) For purposes of R307 405 it shall also additionally mean for:~~

~~(a) A rate of emissions that would equal or exceed any of the following rates:~~

~~Asbestos: 0.007 tpy;~~

~~Beryllium: 0.0004 tpy;~~

~~Mercury: 0.1 tpy;~~

~~Vinyl Chloride: 1 tpy;~~

~~Fluorides: 3 tpy;~~

~~Sulfuric acid mist: 7 tpy;~~

~~Hydrogen Sulfide: 10 tpy;~~

~~Total reduced sulfur (including H₂S): 10 tpy;~~

~~Reduced sulfur compounds (including H₂S): 10 tpy;~~

~~Municipal waste combustor organics (measured as total tetra through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2 grams per year (3.5 x 10⁻⁶ tons per year);~~

~~Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year);~~

~~Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year);~~

~~Municipal solid waste landfill emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year);~~

~~(b) In reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the Clean Air Act not listed in (1) and (2) above, any emission rate.~~

~~(c) Notwithstanding the rates listed in (1) and (2) above, any emissions rate or any net emissions increase associated with a major source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 ug/cubic meter, (24 hour average).]~~

"Solid Fuel" means wood, coal, and other similar organic material or combination of these materials.

"Solvent" means organic materials which are liquid at standard conditions (Standard Temperature and Pressure) and which are used as dissolvers, viscosity reducers, or cleaning agents.

"Source" means any structure, building, facility, or

1 installation which emits or may emit any air pollutant subject
2 to regulation under the Clean Air Act and which is located on
3 one or more continuous or adjacent properties and which is under
4 the control of the same person or persons under common control.
5 A building, structure, facility, or installation means all of
6 the pollutant-emitting activities which belong to the same
7 industrial grouping. Pollutant-emitting activities shall be
8 considered as part of the same industrial grouping if they
9 belong to the same "Major Group" (i.e. which have the same two-
10 digit code) as described in the Standard Industrial
11 Classification Manual, 1972, as amended by the 1977 Supplement
12 (US Government Printing Office stock numbers 4101-0065 and 003-
13 005-00176-0, respectively).

14 "Stack" means any point in a source designed to emit
15 solids, liquids, or gases into the air, including a pipe or duct
16 but not including flares.

17 "Standards of Performance for New Stationary Sources" means
18 the Federally established requirements for performance and
19 record keeping (Title 40 Code of Federal Regulations, Part 60).

20 "State" means Utah State.

21 "Synthesized Pharmaceutical Manufacturing" means the
22 manufacture of pharmaceutical products by chemical synthesis.

23 "Temporary" means not more than 180 calendar days.

24 "Temporary Clean Coal Demonstration Project" means a clean
25 coal technology demonstration project that is operated for a
26 period of 5 years or less, and which complies with the Utah
27 State Implementation Plan and other requirements necessary to
28 attain and maintain the national ambient air quality standards
29 during the project and after it is terminated.

30 "Threshold Limit Value - Ceiling (TLV-C)" means the
31 airborne concentration of a substance which may not be exceeded,
32 as adopted by the American Conference of Governmental Industrial
33 Hygienists in its "Threshold Limit Values for Chemical
34 Substances and Physical Agents and Biological Exposure Indices,
35 pages 15 - 72 (2000)."

36 "Threshold Limit Value - Time Weighted Average (TLV-TWA)"
37 means the time-weighted airborne concentration of a substance
38 adopted by the American Conference of Governmental Industrial
39 Hygienists in its "Threshold Limit Values for Chemical
40 Substances and Physical Agents and Biological Exposure Indices,
41 pages 15 - 72 (2000)."

42 "Total Suspended Particulate (TSP)" means minute separate
43 particles of matter, collected by high volume sampler.

44 "Toxic Screening Level" means an ambient concentration of
45 an air contaminant equal to a threshold limit value - ceiling
46 (TLV- C) or threshold limit value -time weighted average (TLV-
47 TWA) divided by a safety factor.

1 "Trash" means solids not considered to be highly flammable
2 or explosive including, but not limited to clothing, rags,
3 leather, plastic, rubber, floor coverings, excelsior, tree
4 leaves, yard trimmings and other similar materials.[]

5 ~~"Vertically Restricted Emissions Release" means the release~~
6 ~~of an air contaminant through a stack or opening whose flow is~~
7 ~~directed in a downward or horizontal direction due to the~~
8 ~~alignment of the opening or a physical obstruction placed beyond~~
9 ~~the opening, or at a height which is less than 1.3 times the~~
10 ~~height of an adjacent building or structure, as measured from~~
11 ~~ground level.~~

12 ~~"Vertically Unrestricted Emissions Release" means the~~
13 ~~release of an air contaminant through a stack or opening whose~~
14 ~~flow is directed upward without any physical obstruction placed~~
15 ~~beyond the opening, and at a height which is at least 1.3 times~~
16 ~~the height of an adjacent building or structure, as measured~~
17 ~~from ground level.]~~

18 "Volatile Organic Compound (VOC)" as defined in 40 CFR
19 51.100(s)(1), as effective on July 1, 2004, and amended on
20 November 29, 2004, by 69 FR 69290 and 69 FR 69298, is hereby
21 adopted and incorporated by reference.

22 "Waste" means all solid, liquid or gaseous material,
23 including, but not limited to, garbage, trash, household refuse,
24 construction or demolition debris, or other refuse including
25 that resulting from the prosecution of any business, trade or
26 industry.

27 "Zero Drift" means the change in the instrument meter readout
28 over a stated period of time of normal continuous operation when
29 the VOC concentration at the time of measurement is zero.

30
31 **KEY: air pollution, definitions**
32 **[September 2, 2005]2006**
33 **Notice of Continuation: June 5, 2003**
34 **19-2-104**
35